

**deister – innovative products and solutions**

The name deister electronic has been synonymous with innovative RFID products and solutions in the fields of security and automatic identification for more than 35 years. Our portfolio of products is used to manage keys and valuable objects, for vehicle identification, access control as well as logistics and automation technology. Developing and marketing new technologies as well as interfaces between products and systems forms the basis to create flexible solutions for customer-specific applications.



**The compact UHF reader**

The TSU 100 is a compact UHF reader designed to identify people and objects up to distances of several meters. With its integrated antenna, it reliably detects UHF transponders. Filter functions and an “auto-tune mode” ensure that the TSU 100 can be installed quickly and easily. The robust housing can withstand even the severest conditions in industry and the environment. This allows the TSU 100 to provide valid results all the time. Readily visible LEDs and an integral beeper indicate positive identification to the user. The TSU 100 is able to decode transponder data encoded by the deister smartframe. Customer-specific or industrial protocols and standard access control formats are also supported.

**Your benefits at a glance:**

- **Simple installation – no coaxial cables**
- **Antenna always in the optimum position – “auto-tune mode”**
- **Calibrated radiant power**
- **Large traffic-light display for status signals**
- **Plug-and-play for easy installation and maintenance**
- **RS485 interface facilitates very long cable runs**

**Technical data**

**Dimensions WxHxD:**

Without cover: 120 x 130 x 60 mm  
 With cover: 144 x 170 x 66 mm

**Weight:**

Without cover: 1.1 kg  
 With cover: 1.4 kg

**Housing material:**

ALU, ABS, PC

**Protection class:**

IP65

**Operating temperature:**

-25...50°C

**Relative humidity:**

5...95%, non-condensing

**Power requirement:**

12...24 VDC / max. 1A

**Frequencies:**

865 – 868 MHz (EU) or  
 902 – 928 MHz (US)

**Output power:**

Max. 0.5 W ERP  
 (ETSI EN 302 208)  
 Max. 0.8 W EIRP  
 (FCC part 15)

**Antenna**

Beam angle: 110°  
 Polarization: Circular

**Transponder protocols:**

ISO18000-6 C  
 (EPC Class1 Gen2)

**Anti-collision:**

Identification of several transponders in the reading field

**Reading/writing distance:**

Up to 3 m, depending on transponder type, antenna configuration and ambient conditions. The writing distance is 50% of the reading distance.

**Interface:**

RS485